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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,627	01/20/2004	Richard B. Fox	A-68881-1/ENB (468878-4)	3320

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EXAMINER	
MCCARRY JR, ROBERT J	

ART UNIT	PAPER NUMBER
3617	

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/761,627	FOX, RICHARD B.	
	Examiner	Art Unit	
	Robert J. McCarry, Jr.	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-9,12,13 and 15-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-9,12,13 and 15-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *05/11/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The Examiner has reviewed the Information Disclosure Statement received on 05/11/05. The prior art reference of McCrary (US 6,169,954) has not been considered since it has already been made of record in the application as a reference cited by the Examiner and was listed on the PTO-892 mailed with the Non-Final Office Action of 03/02/05. On page 3 of the IDS the Non Patent Literature references of "PATH demonstrates Automated Bus Rapid Transit Technologies" and "Phileas-a new concept for high quality public transportation" have both been considered. The Examiner has not considered the other references on page 3 since the applicant did not provide copies of these references.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5, 7, 8 and 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usami (US 6,138,062) in view of Asanuma et al (US 5,627,754).

Usami discloses as guided vehicle adapted for travel at high expressway speeds having a pair of front wheels pivotally connected to the vehicle for steering the vehicle and operated by a steering mechanism. Sensing mechanisms in the form of laser emitters 12, 14 sense the guidepath formed by the sidewalls of the side walls of the path. The laser emitters are also used to sense objects next to the vehicle and provide a

signal to the steering mechanism to move the car. The vehicle is further comprised of a video camera 16 for visualizing the lane ahead of the vehicle. The entire system is controlled by an electronic control unit (ECU) or processor.

Usami discloses the guided vehicle system as disclosed above. However, Usami does not disclose the use of steering components on both the front and rear wheels. Usami discloses only steering the front wheels. Asanuma et al discloses a vehicle controlled with both front and rear wheel steering mechanisms. It would have been obvious to one of ordinary skill to have added a rear steering mechanism, like that of Asanuma et al, to a vehicle like that of Usami, in order to give the car better stability and maneuverability while traveling at high speeds.

Usami also does not disclose a rear sensing unit near the rear wheels for sensing the guidepath. It would have been obvious to one of ordinary skill in the art that placing laser emitting sensors at the rear of the car would have been an obvious multiplication of parts in order to provide improved guidance for the car in and around other vehicles.

Regarding claims 15-20 drawn to the method of guiding a vehicle. Usami in view of Asanuma et al disclose a guided vehicle monitoring indicators on the sides of a travel lane. The indicators are the side walls and painted lines of the roadway. Monitored by both a video camera and laser emitters on the vehicle.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usami (US 6,138,062) in view of Asanuma et al (US 5,627,754) further in view of Uehara (US 5,938,707).

The combination of Usami and Asamura et al disclose the guided vehicle combined with front and rear steering mechanisms. However, the system does not disclose the use of guide magnets as emitters in the roadway for the vehicle to follow and use and guide markers. Uehara discloses a vehicle being guided by magnetic emitters 12 embedded in the roadway. It would have been obvious to one of ordinary skill in the art to have applied a vehicle, like that of Usami, to a guide system like that of Uehara, in order to better control the vehicle along a given roadway and at high speeds of travel.

Claims 9-14, 22 and 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Usami (US 6,138,062) in view of McCrary (US 6,169,954)

Usami discloses as guided vehicle adapted for travel at high expressway speeds having a pair of front wheels pivotally connected to the vehicle for steering the vehicle and operated by a steering mechanism. Sensing mechanisms in the form of laser emitters 12, 14 sense the guidepath formed by the sidewalls of the side walls of the path. The laser emitters are also used to sense objects next to the vehicle and provide a signal to the steering mechanism to move the car. The vehicle is further comprised of a video camera 16 for visualizing the lane ahead of the vehicle. The entire system is controlled by an electronic control unit (ECU) or processor.

Usami discloses the guided vehicle system as disclosed above. However, Usami does not disclose the use of couplers mounted on the vehicle for mating like vehicles together. It would have been obvious to one of ordinary skill in the art to have applied couplers, like that of McCrary, to a vehicle system like that of Usami in order to more

efficiently move several vehicle to a common destination in order to save on fuel costs and promote an environmentally friendly travel option.

Response to Arguments

Applicant's arguments filed 09/07/05 have been fully considered but they are not persuasive. Applicant argues that the combination of the prior art references cannot be made since the prior art makes no motivation or suggestion to combine the references. It is one of ordinary skill in the art that makes the suggestion to combine. To have a vehicle with a front steering system and a second vehicle with a front and rear steering system, one of ordinary skill in the art would have the motivation to see that if four wheel steering can be done on one vehicle, then it could be done on a vehicle in combination with features, like that of an advanced guidance system.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. McCarry, Jr. whose telephone number is (571) 272-6683. The examiner can normally be reached on Monday through Friday 7:00am to 3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joseph Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert J. McCarry, Jr.
Examiner
Art Unit 3617

November 18, 2005

S. JOSEPH MORANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600